Department of
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Bureau of Land & Water Quality August 2003

O&M Newsletter
A monthly newsletter for wastewater discharge licensees, treatment facility operators, and associated persons

Federal Water Pollution Control Law

The federal water pollution control law, the Clean Water Act, provides a program for protecting the waters of our nation. The Refuse Act, passed in 1899 is the earliest federal law directed at water pollution in the United States. The modern Clean Water Act was passed in 1972. In Act established the National Pollutant Discharge Elimination System (NPDES) permit program. The basic framework, effluent limits, water quality requirements, the permit program is still used today.

The EPA initially focused on "conventional pollutants, such as biochemical oxygen demand, suspended solids, rather than "toxic" pollutants, such as organics and metals. In 1987, the Act was amended to focus programs for toxics control. In addition, the amendments of 1987 established a revolving loan program, established a timetable for regulation of storm water, strengthened water quality requirements and expanded enforcement tools.

In 1990 the oil spill provisions of the Oil Pollution Act was overhauled in response to the Exxon Valdez oil spill.

The objective of the CWA is to "restore and maintain the chemical, physical and biological integrity of the nation's water". The Act establishes the following goals to achieve this objective:

- Elimination of the discharge of pollutants into surface waters; and
- Achievement of a level of water quality which "provides for the protection and propagation of fish, shellfish and wildlife" and "for recreation in and on the water."

The Act also establishes a "national policy" that the "discharge of toxic pollutants in toxic amounts" shall be prohibited.

The Clean Water Act includes regulatory tools designed to meet the statutory objectives and goals. These tools include:

- a prohibition of discharges, except as in compliance with the Act (Section 301);
- a permit program (Section 402);
- a system for determining the limitations to be imposed on regulated discharges (Section 301, 307, 307) ;
- a process for cooperative federal/state implementation (Section 401, 402)

- a system for preventing, reporting, and responding to spills (Section 311); and
- a strong enforcement mechanism (Section 309, 505).

The Clean Water Act establishes a broad prohibition against "the discharge of any pollutant by any person" except as in compliance with the Act's permit requirements, effluent limits and other provisions. The "discharge of a pollutant" is defined to mean "any addition of any pollutant to navigable waters from any point source". The terms addition, pollutant, navigable waters, and point source are very important.

The introduction of a pollutant into a body of water is an addition. Pollutant is defined to include dredged soil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharge into water. Point source is defined to include "any discernable, confined and discrete conveyance … from which pollutants are or may be discharged." This definition has been interpreted to cover almost any conveyance, from which a pollutant may be discharged, including pipes, ditches, erosion channels, and gullies. The conveyance need not be manmade. Vehicles, such as bulldozers or tank trucks have also been held to be point sources. Human beings have been held not to be point sources. Navigable waters are defined to include all "waters of the United States. Groundwaters are not within the scope of "water of the United States".

A NPDES permit is required for any discharge of a pollutant from a point source to water of the United States. Any material added to the water (or, in some cases, a change in some characteristic of the water, such as pH or temperature), is a pollutant and any discrete conveyance, such as a pipe, ditch, vessel, or container, is considered a point source. Water of the United States include almost any surface water, including adjacent wetlands, except wastewater treatment systems such as lagoons, or treatment ponds designed to meet the requirements of the Act.

The NPDES permit application, whether for a new discharge or for an existing discharge, requires extensive information about the facility and the nature of the discharge from the facility. Form 2C requires the applicant to provide extensive information about the nature of the discharge from the facility, including quantitative data. If the facility is subject to an effluent guideline expressed in terms of maximum permissible amounts of pollution per unit production, the applicant must provide the department with production data. A responsible corporate officer must sign the permit application. The application must be submitted at least 180 days prior to the date a proposed discharge is to commence or 180 days prior to the expiration of an existing permit. If a complete application is filed at least 180 days prior to the expiration of an existing permit, the existing permit will be "continued" (i.e., will remain in effect) until the permitting authority issues a new permit.

The primary purpose of a MEPDES permit is to establish enforceable effluent limitations. In addition the

permit establishes a number of other enforceable conditions, such as monitoring, management requirements, and boilerplate requirements.

The MEPDES program depends on self-monitoring. The permit requires dischargers to monitor on a regular basis and to report the results of this monitoring to the department on standardized discharge monitoring reports (DMRs)

The EPA NPDES regulations contain provisions requiring both routine and non-routine reporting. These requirements are listed below.

- Planned changes – any planned physical alteration or addition to the permitted facility that could result in the creation of a new source or that could significantly change the nature or quantity of the pollutants discharges or that could affect the permittee's sludge use or disposal practices.
- Anticipated noncompliance – planned changes in the permitted facility or activity that may result in noncompliance.
- Transfers – transfer of the permit to another "person"
- Monitoring results – Discharge Monitoring Reports as required in the permit
- Compliance schedules – reports required under compliance schedules
- 24-hour reporting – any noncompliance that may endanger health or the environment, bypasses, upsets
- Other noncompliance – any other noncompliance (reported with DMRs)
- Discharges exceeding notification levels in 122.42 – discharge in which levels of toxics pollutants exceed levels established in EPA regulations
- Other information – when permittee becomes aware that it failed to submit any relevant facts, or submitted incorrect information, in a permit application.

Permit limitations may be expressed as technology-based or water quality-based limitations expresses as a mass limitation (e.g., 2 pounds per day or 2 pounds per x units of production) or a concentration limitation (e.g., 50 mg/L). Other types of permit limitations include visual observations (e.g., no visible sheen, foam, or floating solids, monitor-only requirements, limitation on "indicator" parameter (e.g., biochemical oxygen demand), flow limitation, pH range, and temperature limitations.

Don Albert

DMR-QA Study 23 Reminder

All major NPDES permittees should have ordered unknown samples from their chosen NIST-Accredited Providers back in June. Commercial laboratories used routinely by permittees for effluent monitoring should have also been instructed by permittees to order DMR-QA samples as well. Many permittees and commercial laboratories have completed the analyses of these unknown samples by now. Please remember to complete the Provider Data Forms with your in-house laboratory test results. You may also need to request copies of Provider Data Forms for any routine DMR-required analyses performed by your regular commercial

laboratory. These should be included with the permittee data packages.

All of the completed Provider Data Forms and the NPDES Permittee Data Report Form should be included in your data package. You should mail the signed original data package to the Provider in time to arrive by the Provider's reporting deadline if earlier than the national EPA DMR-QA Study 23 deadline of August 29, 2003. A copy of the data package may be sent to Ken Jones at DEP, but is not required. The state and regional DMR-QA coordinators would both like to somewhat reduce the amount of paperwork required of Maine permittees. There is also no longer a need to send a copy of the data package to Denise DePierro at EPA Region I. However, please be sure to keep a copy of your complete data package for your own records! If there is ever a need for DEP to see your data package later, I will request a copy from you.

The Provider will evaluate the data reported and send a permittee performance evaluation to the permittee, DEP and EPA. The evaluation should arrive by October 31, 2003. Any "not acceptable" results in this evaluation should be investigated by the permittee and the causes of the laboratory errors corrected. A letter should then be sent to Ken Jones outlining any corrective actions that were taken in the permittee's laboratory to prevent similar problems in the future. This should be completed by December 8, 2003.

Ken Jones

Operator Certification Exam

The Fall Wastewater Treatment Plant Operator Exam will be given in the usual locations on November 12, 2003. Applications must be postmarked by September 27, 2003 or delivered to the DEP by September 29, 2003. If you have any questions or need an application please call Leslie Rucker at (207) 287-9031.

Approved Training

The fall training calendars for JETCC and MRWA should be ready for the next issue of the *O&M News*.

September 25, 2003 in Portland, ME – Bulk Chemical Delivery Workshop- Sponsored by MWUA/NEWWA (508) 893-7979 – Approved for 6 hours.
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December 2&3, 2003 in Freeport, ME - MRWA Annual Conference – Sponsored by MWRA, (207) 729-6569 – Approved for TBA hours.

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